POCKET COMPUTER

EXCITEMENT IS BACK IN

THE SHARP MODEL 1261!

© Copyright 1985 POCKET COMPUTER NEWSLETTER

Advertisement

NEW POCKET UNIT CREATES EXCITEMENT!

A few months ago we told our readers about the new Sharp PC-1261. This is a computer measuring a scant 2-3/4 by 5-3/8 inches and less than half an inch in thickness. It fits easily into a shirt pocket. Yet, it contains an incredible 40 kilobytes of software on ROM as well as an impressive ten kilobytes of user (RAM) memory in which to store program(s) and data. (See the article on the next page for a detailed description of the capabilities packed into this incredible pocket computer!)

Since telling our readers about the amazing Sharp PC-1261, we have received many requests for help in obtaining this PC. Due to this unprecedented interest, we have elected to stock this new model so that we may make deliveries to our loyal pocket computer afficionados.

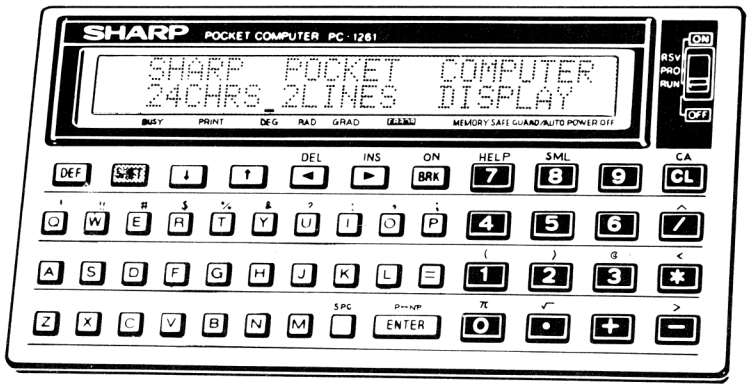
Of course, we plan to provide coverage of this PC during 1985 within the pages of *PCN*. Be sure to subscribe if you are not already enrolled!

Want a super program to run on your PC-1261? Take a look at the description of our data manager program shown on the back page of this brochure! It is low cost, is easy to operate, and capable of performing many useful jobs.

Finally, for a limited time only, we can also supply either the Sharp CE-125 (combination Printer/MicroCassette unit) or Sharp CE-126P (printer with an interface to a standard cassette recorder). See the back page for details.

Order now! Our supply is limited. (Prices shown apply only in United States of America.)

- Help function for BASIC, ASCII codes, error messages and locating errors
- Optional CE-126P Thermal Printer/Audio Cassette interface
- Easy simulation program mode — plain English computation programs without using BASIC
- Optional CE-125 Thermal Printer/Microcassette "book-size" unit
- Large dual-line 24 character liquid crystal display
- Expanded RAM capacity
- Password protection
- 40K bytes ROM



- 8-bit CMOS CPU
- "Beep" function

MODEL PC-1261

- 18 reservable/definable keys for convenient data input and program start
- Ultra compact and light (4 oz.) for true "shirt-pocket" portability (5¼" × 2¾" × ⅜")
- Expanded BASIC command flexibility
  - Two letter variables
  - Two-dimensional variable arrays
  - Line numbers to 65,279

Sharp Electronics has released a pair of new pocket computers dubbed the models PC-1260 and PC-1261. The models are equivalent except that the PC-1260 contains 4.5 kilobytes of user RAM while the PC-1261 contains 10.5 kilobytes of RAM. This review specifically covers the PC-1261.

The PC-1261 is identical in size to the earlier models PC-1250/1251. In fact, it may be used with the CE-125 printer/casette interface that was originally provided for those models. Despite its small size, the 1261 has a number of exciting additional features. For starters, its display is capable of showing two lines of 24 characters each. While the characters are slightly smaller in size than those of the earlier 1250, they are still highly readable. Of course, the 1261 includes the same kind of variable contrast control as that provided in its predecessor. Thus, the intensity of the display can be easily changed to compensate for actual lighting conditions. Most of the annunciators on the display of the 1261 are indicated by the presence or absence of tiny cursor bars at the bottom of the screen. These correspond directly to legends that are provided on the case of the unit just below the LCD. The two-line display is an exciting advance for pocket computer users. It makes it much easier to input information as the query can be placed on one line while the answer appears on the second. Additionally, when outputting information, one line can serve for labels or identifiers while the second line reflects corresponding values.

The keyboard on the PC-1261 is identical in size and number of keys to the earlier PC-1250. However, Sharp, has made several significant improvements. For example, the right and left parentheses have been positioned over the digit 1 and digit 2 keys. They used to be over the scroll-up and scroll-down keys where they could cause a lot of trouble if you forgot to hit the shift key when you wanted to invoke a paren sign. Another change to the keyboard is the removal of the exponent character that was activated using the shifted * sign on the 1250. Now you just use the letter E. There are also two new functions that may be invoked from the keyboard that were not on the earlier 1250. These are the HELP function and SMALL function. The former is invoked by using shift-7. The latter by using shift-8. The SMALL function enables one to use upper and lower case characters. The HELP function brings up a compact reference that lists all of the possible key words available in the unit. This function can be expanded to provide examples of the use of each key word. The HELP function can even be used to bring up a character code table. This table lists the hexadecimal code for each displayable character.

The new PC-1261 is equipped with an impressive amount of ROM: 40 kilobytes! This amount of ROM enables the unit to contain an enhanced BASIC interpreter, the HELP function, and other features not found in previous models having such small physical size.

The PC-1261 has a powerful new feature that Sharp refers to as "Easy Simulation Programming." Perhaps a more appropriate description is "automated calculation." This feature allows you to put a number of formulas in memory, such as : A = B + C - D. The lefthand side of the equation must be preceded by a # sign and may only contain one variable. The righthand side of the equation may contain up to 9 variables. These formulas are saved in a special section of user RAM. The amount of memory set aside for this purpose may be specified by the user in 128-byte increments. Memory used for this purpose (over and above an initial 128-byte block) is taken away from BASIC program space.

In order to automatically calculate the value of an expression, you merely enter a # sign followed by the identifying variable (when the PC is in the RUN mode) and then the ENTER key. Doing this causes the variable names that are on the right side of the expression to appear on the top line of the display. The numerical value desired for each variable may then be entered on the second line of the display underneath the corresponding variable names. When the last value for an expression has been entered, the PC-1261 will automatically calculate the value for the expression and display it under the variable name assigned to the lefthand part of the equation. Once an initial set of values has been entered for an expression, you can quickly obtain a whole series of answers by varying parameter values at will. This is accomplished by moving the cursor to the variable values that you want to change and entering new data. Each time new data is entered, the expression is recalculated and displayed for the user.

The active engineer, scientist, mathematician, or businessman will like this automated formula-solving capability. A number of your favorite formulas can be stored in memory for instant recall and calculation. Since the PC-1261 allows variables to have multiple character names, you can even set up formulas using plain English statements such as NET = SALES - COST. If you do a lot of repetitive formula solving, you will definitely appreciate this somewhat novel feature.

The PC-1261 is a somewhat unique creature in that, along the lines of the 1250/1251, it tries to maintain programming compatability with the original PC-1211 while offering an expanded instruction set and advanced capabilities. Where it succeeds, of course, it means that PC-1211, PC-1250, PC-1250A, PC-1251, PC-1260 and PC-1261 programs are "upwards" compatible. (That "upwards" means that a program created on an earlier model should run on a later version. You may not, however, be able to go the other way.)

The best way to gain an overview of the 1261's operational and programming capabilities is to show a synopsis of its commands and keywords: ABS, ACS, AND, AREAD, ASC, ASN, ATN, BEEP, CHAIN, CHR$, CLEAR, CLOAD, CLOAD?, CLS, CONT, COS, CSAVE, CURSOR, DATA, DEG, DEGREE, DIM, DMS, END, EQU #, EXP, FOR/TO/STEP, GOSUB, GOTO, GRAD, IF/THEN, INKEY$, INPUT, INPUT #, INT, LEFT$, LEN, LET, LIST, LIST #, LLIST, LLIST $, LN, LOG, LPRINT, MEM, MEM #, MERGE, MID$, NEW, NEW #, NEXT, NOT, ON...GOSUB, ON...GOTO, OR, PASS, PAUSE, PI, PRINT, PRINT #, RADIAN, RANDOM, READ, REM, RESTORE, RETURN, RIGHT$, RND, RUN, SGN, SIN, SQR, STOP, STR$, TAN, TROFF, TRON, USING, VAL and WAIT.

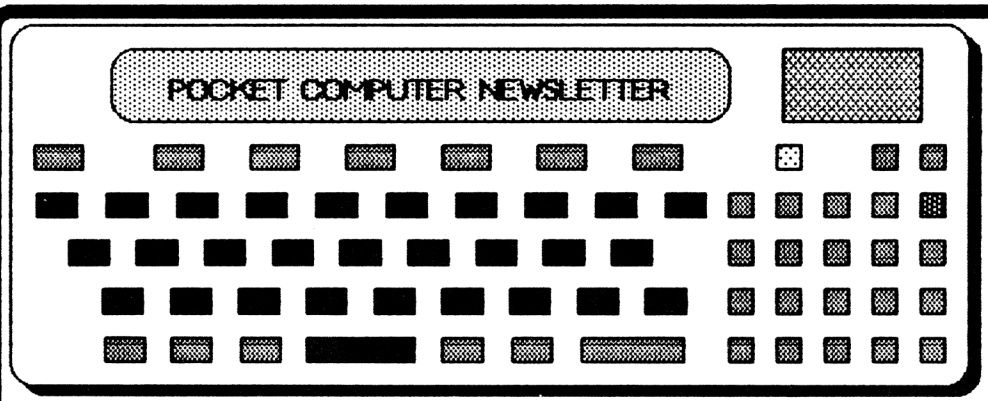
Many of these will be familiar to even early PC-1211 users, but note that there are many new ones, such as those ending in $ (for string operations) and some of those ending in the # sign (such as EQU #) which are associated with the "Easy Simulation Programming" mode.

While PEEK and POKE directives are not mentioned in the User's Manual, PC-1261 users have already discovered that these instructions can be executed. A number of people are now working on decoding the machine language instruction set used by the PC-1261. (It has a different CPU than that used by the PC-1500.) It is anticipated that additional information on this subject will be published by *PCM* during 1985.

PC-1500 programmers might note that statements associated with printing operations, such as LCURSOR, are absent. The 1261 appears to be more difficult to program for use with a printer such as the CE-125 or CE-126P. This appears to be due primarily to the fact that in normal use only two fields can be printed on a 24-character line. Alphanumeric (string) data is printed left-justified within a 12-character field. Numeric data is printed right-justified in a similar 12-character field. Two 12-character fields make up a 24-character printer line. This is somewhat restrictive. You might think this could be circumvented by the use of LPRINT USING statements. While the instruction manual suggests that numeric and alphanumeric data can be mixed within a printed line through LPRINT USING formats (such as *##.##CCCC##.##CCCC*), tests indicate you can only switch from string data to numeric data (or vice-versa) once within a printed line! This makes it tough to print fancy stuff (do "pretty-printing").

[There is a way around this limitation. It requires that you convert numeric data into string format. You can then build up, say, a 24-character string-variable that combines several alphanumeric segments (including those segments that were converted from numeric format) under one variable name. This entire string can then be printed out by declaring a USING format that consists of 24 alphanumeric characters.]

All-in-all, the PC-1261 seems to be a nice advance in the state-of-the-art. Having 10K of user memory available in a truly pocketable unit is nice. Being able to maintain your library of programs from the earlier PC-1211/PC-1250 models is definitely a plus factor. And, having advanced features such as 2-dimensional arrays and the "automatic calculation mode," (coupled with the extra memory) is a nice kicker. If you have been thinking about upgrading your pocket computing power, take a good look at the PC-1261. It may be just the solution to your advancing needs!



A Newsletter for Pocket Computer Fans!

This is a timely, compact, easy reading publication that provides up to the minute information of vital interest to people who use pocket computers -- and who want to know how to better capitalize on their capabilities. In the past we have concentrated on the Sharp PC-1500 and Radio Shack PC-2 models. But we are now expanding our scope to include others including the exciting Hewlett-Packard HP-71B and the new Sharp PC-1260 and 1261 models. We report primarily on pocket and hand-held computers that are capable of executing a high level language such as BASIC.

Especially for Busy People

This is a *newsletter*. It is not a magazine. The material we provide is condensed to about 8 pages per issue. This carefully selected information is presented in an easy to digest format that is readily assimilated by busy people.

Product and Equipment Reviews

As new models and accessories become available we publish forthright reviews as reported to us by actual users. Books, software packages and other kinds of supporting materials also come under our careful scrutiny.

Important Operating Tips and Practical Advice

Every model has its strengths and weaknesses, its ins and outs. Our publication quickly compiles critical information from users and passes this on to you. We show you how to save keystrokes and maximize performance. We often uncover hidden features and are able to tell you about capabilities not discussed in the manufacturer's literature. (We have, in particular, published a wealth of material about the actual machine codes used in the PC-1500/PC-2!)

Lots of Practical Programs

We publish all kinds of practical, useful programs that enhance the use and enjoyment of your own personal unit. In past issues we have presented programs that: convert numbers from one base to another, perform linear regression analysis, plot aviation courses, solve for unknowns in triangulation problems, tally supermarket purchases, do polynomial arithmetic, display a calendar of any month over a 500 year range, perform linear interpolation, calculate amortization, figure tab locations for complex columnar reports, perform simple animation, dump memory, do curve fitting, renumber all or part of a program, and play a variety of amusing games. We are always on the lookout for the highest quality programs to bring to you.

Delivered with a Simple Guarantee

If, at any time, you become disatisfied with our publication, you may *simply cancel your subscription and receive a refund for unmailed issues.*

Product Reviews
Programming Tips
Tutorials
Short Cuts
Technical Information
Application Forums

Available Only by Prepaid Subscription for a Calendar Year Period (January - December). You are sent back issues for the calendar year to which you subscribe, at the time you enroll.

__ I am interested. Please send more information. I have the following Model Pocket Computer: _____

__ Enroll me as a 1985 Subscriber (Issue numbers 37-44). $24.00 in U.S. (U.S. $30.00 to Canada/Mexico. Elsewhere U.S. $40.00 payable in U.S. funds against a U.S. bank.)

__ Enroll me as a 1984-85 Subscriber (Issue numbers 31-44). $42.00 in U.S. (U.S. $51.00 to Canada/Mexico. Elsewhere U.S. $70.00 payable in U.S. funds against a U.S. bank.)

__ Enroll me as a 1983-85 Subscriber (Issue numbers 21-44). $78.00 in U.S. (U.S. $93.00 to Canada/Mexico. Elsewhere U.S. $120.00 payable in U.S. funds against a U.S. bank.)

__ Enroll me as a 1982-85 Subscriber (Issue numbers 11-44). $102.00 in U.S. ($125.00 to Canada/Mexico. Elsewhere U.S. $160.00 payable in U.S. funds against a U.S. bank.)

__ Check here if paying by MasterCard or VISA. Please give credit card information below.

Orders must be accompanied by payment in full. All checks must be magnetically encoded, payable in U.S. funds and drawn against a U.S. bank.

Name: _____

Addr: _____

City: _____ State: ____ Zip: _____

MC/VISA #: _____

Signature: _____ Exp. Date: _____

mail this order form to:
POCKET COMPUTER NEWSLETTER
P.O. BOX 232, SEYMOUR, CT 06483

POCKET DATA MANAGER PROGRAM

Here is a versatile data management program for the Sharp PC-1261 Pocket Computer. This ready-to-use program gives you remarkable capability! You may define records with up to 80 characters divided over as many as 20 fields. Add and delete data, list all or part of a file. Yes, even search or sort by field contents! Even save and recall data files on tape. We provide operating instructions, listing, and ready-to-load program cassette. This is the powerful tool you need in your PC-1261!
(Note: This program was designed strictly for use on the Sharp Model PC-1261 Pocket Computer. Not intended for use on any other model. Utilizes almost 5K of memory, leaving about 4K for data.)

HOW TO PLACE YOUR ORDER

Just use the convenient order form on this page. Check off the items desired. Include payment with your order. Note that prices include delivery in the U.S. **Please be sure to include a street address if ordering equipment (PC-1261, CE-125 or CE-126P) as we ship these items by United Parcel Service.**

MAIL ORDER FORM

Prices shown apply only in United States.
Orders must be accompanied by payment in full.

__ Send me a new Sharp PC-1261 Pocket Computer at a price of just $195.00 (* delivered by United Parcel Service).

__ Send me a new Sharp CE-125 Printer/Microcassette unit at $170.00 (* delivered by United Parcel Service).

__ Send me a new Sharp CE-126P Printer/Cassette Interface for just $95.00 (* delivered by United Parcel Service).

__ Send me your Pocket Data Management Program for the PC-1261 for the low price of just $20.00.

__ Enter me as a 1985 *PCW* Subscriber (Issue numbers 37-44). $24.00 in U.S. (Prices higher outside of United States.)

__ Check here if paying by MasterCard or VISA. Please give credit card information below.

__ Connecticut residents must add 7.5% State Sales Tax on all items except newsletter subscriptions. Thank you!

*** Please supply street address for delivery of items marked by an asterisk as United Parcel Service will not make deliveries to post office box addresses.**

Name: _____

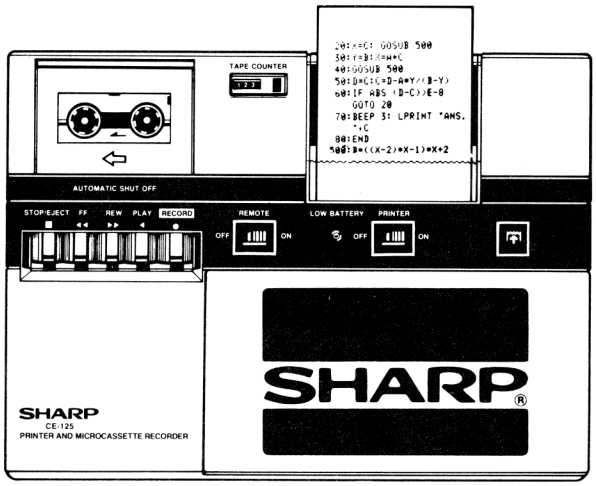
Addr: _____

City: _____ State: ____ Zip: _____

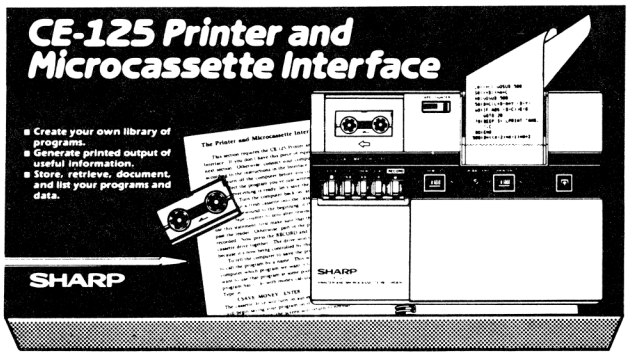
MC/VISA #: _____

Signature: _____ Exp. Date: _____

mail this order form to:
POCKET COMPUTER NEWSLETTER
P.O. BOX 232, SEYMOUR, CT 06483



- **CE-125 features quiet, easy to read 24 digit thermal printer.**
- **CE-125 features a soft key controllable microcassette for simple program loading/saving.**
- **CE-125 is operable, even when batteries are being charged with its AC adaptor/charger.**
- **CE-125 comes equipped with rechargeable NI-CAD batteries.**
- **CE-125 offers fast printouts—no ink or messy ribbons needed.**
- **Tape counter for quick location of pre-recorded programs.**
- **Microcassette tape.**


CE-125 Printer and Microcassette Interface
Create your own library of programs.
Generate printed output of useful information.
Store, retrieve, document, and list your programs and data.
SHARP
SHARP

CE-125 PRINTER/MICROCASSETTE MODULE

This is a compact (8 by 6 by 1 inch) unit that has both a thermal printer and a complete microcassette recorder/playback unit. The PC-1261 mounts on the unit to provide an all-in-one combination computer/printer/mass storage system. The microcassette portion is used to store/retrieve data and programs. The printer provides listings of programs and data. Operates from rechargeable batteries (included in the unit). Comes complete with charger, paper, and is ready to operate!

CE-126P PRINTER/CASSETTE INTERFACE

This is a tiny, highly portable, thermal printer that also contains an interface to a standard cassette recorder. Operates from rechargeable batteries (included in the unit). Plugs into the PC-1261 to provide printout of programs and data. Cassette interface portion permits programs/data to be stored and retrieved from your own audio cassette machine. Comes complete, ready to operate.